

WE CLAIM:

*5 sub A<sub>1</sub>*

1. A breathable, elastic film comprising:  
a high performance elastomer; and  
a low performance elastomer filled with a plurality of particles suitable for forming pores in said film upon stretch-thinning of said film, said film having been stretch-thinned, whereby a low performance elastomer portion of said film forms a plurality of micropores.
2. A film in accordance with Claim 1, wherein said high performance elastomer is a styrenic block copolymer.
3. A film in accordance with Claim 1, wherein said particles are calcium carbonate particles.
4. A film in accordance with Claim 1, wherein said low performance elastomer is a polyolefin.
5. A film in accordance with Claim 1, wherein said low performance elastomer is LLDPE.

6. A film in accordance with Claim 1, wherein said high performance elastomer is filled with a plurality of said particles suitable for forming pores in said film upon said stretch-thinning of said film.

7. A film in accordance with Claim 6, wherein a high performance elastomer portion of said film forms a plurality of said micropores.

8. A film in accordance with Claim 6, wherein said particles are calcium carbonate particles.

9. A film in accordance with Claim 1 further comprising a biaxial stretching property.

10. A film in accordance with Claim 1 further comprising elastic stretch properties greater than about 100%.

11. A film in accordance with Claim 1, wherein said high performance elastomer comprises in a range of about 5% to about 30% by weight of said film.

12. A film in accordance with Claim 1, wherein said particles comprise greater than about 50% by weight of said film.

13. A film in accordance with Claim 1, wherein said low performance elastomer comprises in a range of about 10% to about 35% by weight of said film.

14. A film in accordance with Claim 1, wherein said high performance elastomer comprises in a range of about 5% to about 30% by weight of said film, said low performance elastomer comprises in a range of about 10% to about 35% by weight of said film, and said particles comprise in a range of about 51% to about 70% by weight of said film.

15. A breathable, laminate material comprising:  
at least one layer of a nonwoven web material; and  
a stretch-thinned film comprising a high performance elastomer and a low performance elastomer filled with a plurality of particles suitable for forming pores in said film upon said stretch-thinning, a low performance elastomer portion of said film forming a plurality of micropores.

16. A breathable, laminate material in accordance with Claim 15, wherein said at least one layer of nonwoven web material is selected from the group consisting of spunbonds, meltblowns, bonded carded webs and combinations thereof.

17. A breathable, laminate material in accordance with Claim 15, wherein said high performance elastomer is filled with a plurality of said particles suitable for forming pores in said film upon said stretch-thinning of said film.

18. A breathable, laminate material in accordance with Claim 17, wherein a high performance elastomer portion of said film forms a plurality of said micropores.

19. A breathable, laminate material in accordance with Claim 15, wherein said film comprises biaxial stretch properties.

20. A breathable, laminate material in accordance with Claim 15, wherein said film comprises elastic stretch properties greater than about 100%.

21. A breathable, laminate material in accordance with Claim 15, wherein said high performance elastomer is a styrenic block copolymer.

22. A breathable, laminate material in accordance with Claim 15, wherein said low performance elastomer is a polyolefin.

23. A breathable, laminate material in accordance with Claim 15, wherein said high performance elastomer comprises in a range of about 5% to about 30% by weight of said film, said low performance elastomer comprises in a range of about 10% to about 35% by weight of said film, and said particles comprise in a range of about 51% to about 70% by weight of said film.

24. A method for producing an elastic, breathable film comprising the steps of:

one of blending and compounding a high performance elastomer with a filled low performance elastomer, forming a blended or compounded product;

forming said blended or compounded product into a film comprising high performance elastomer portions and low performance elastomer portions; and

stretch-thinning said film, forming a plurality of micropores in said low performance elastomer portions of said stretch-thinned film.

25. A method in accordance with Claim 24, wherein said low performance elastomer is filled with a plurality of calcium carbonate particles.

26. A method in accordance with Claim 24, wherein said high performance elastomer is filled with a plurality of particles suitable for forming pores in said high performance elastomer portions of said film upon said stretch-thinning.

27. A method in accordance with Claim 26, wherein said high performance elastomer portions of said stretch-thinned film form a plurality of said micropores.

28. A method in accordance with Claim 24 further comprising bonding said stretch-thinned film to a nonwoven web material, forming a breathable laminate.

29. A method in accordance with Claim 28, wherein said nonwoven web material is selected from the group consisting of spunbonds, meltblowns, bonded carded webs and combinations thereof.

30. A method in accordance with Claim 24, wherein said high performance elastomer is a styrenic block copolymer.

31. A method in accordance with Claim 24, wherein said low performance elastomer is a polyolefin.

32. A method in accordance with Claim 24, wherein said blended or compounded product comprises in a range of about 5% to about 30% by weight of said high performance elastomer and in a range of about 10% to about 35% by weight of said low performance elastomer on an unfilled basis.

33. A breathable, elastic film comprising:

a blend of a high performance elastomer and a low performance elastomer, said blend filled with a plurality of particles suitable for forming pores in said film upon stretch-thinning of said film, said film having been stretch-thinned, whereby a plurality of micropores are formed in said film.

34. A film in accordance with Claim 33, wherein said high performance elastomer is a styrenic block copolymer.

35. A film in accordance with Claim 33, wherein said particles are calcium carbonate particles.

36. A film in accordance with Claim 33, wherein said low performance elastomer is a polyolefin.

37. A film in accordance with Claim 33, wherein said low performance elastomer is LLDPE.

38. A film in accordance with Claim 33 further comprising a biaxial stretching property.

39. A film in accordance with Claim 33 further comprising elastic stretch properties greater than about 100%.

40. A film in accordance with Claim 33, wherein said high performance elastomer comprises in a range of about 5% to about 30% by weight of said film, said low performance elastomer comprises in a range of about 10% to about 35% by weight of said film, and said particles comprise in a range of about 51% to about 70% by weight of said film.



1. The first step is to identify the problem. This involves understanding the current situation and what needs to be changed.

42. A personal care absorbent article in accordance with Claim 41,  
wherein said high performance elastomer is a styrenic block copolymer.

44. A personal care absorbent article in accordance with Claim 41,  
wherein said low performance elastomer is a polyolefin.

KCC-1077-CIP

46. A personal care absorbent article in accordance with Claim 41, wherein said film comprises a biaxial stretching property.

47. A personal care absorbent article in accordance with Claim 41, wherein said film comprises elastic stretch properties greater than about 100%.

48. A personal care absorbent article in accordance with Claim 41, wherein said breathable, elastic film comprises in a range of about 5% to about 30% by weight of said high performance elastomer, in a range of about 10% to about 35% by weight of said low performance elastomer, and in a range of about 51% to about 70% by weight of said particles.

49. A diaper comprising:

a fluid pervious cover sheet, a fluid impervious backsheet and an absorbent layer disposed between said fluid pervious cover sheet and said fluid impervious backsheet, at least one of said fluid pervious cover sheet, said fluid impervious backsheet and said absorbent layer comprising a breathable, elastic film comprising a blend of a high performance elastomer and a low performance elastomer, said blend filled with a plurality of particles suitable for forming pores in said film upon stretch-thinning of said film, said film having been stretch-thinned, whereby a plurality of micropores are formed in said film.

50. A diaper in accordance with Claim 49, wherein said high performance elastomer is a styrenic block copolymer.

51. A diaper in accordance with Claim 49, wherein said particles are calcium carbonate particles.

52. A diaper in accordance with Claim 49, wherein said low performance elastomer is a polyolefin.

53. A diaper in accordance with Claim 49, wherein said film comprises a biaxial stretching property.

54. A diaper in accordance with Claim 49, said film comprises elastic stretch properties greater than about 100%.

55. A diaper in accordance with Claim 49, wherein said breathable, elastic film comprises in a range of about 5% to about 30% by weight of said high performance elastomer, in a range of about 10% to about 35% by weight of said low performance elastomer, and in a range of about 51% to about 70% by weight of said particles.

- ✓ 56. A personal care absorbent article comprising:

a fluid pervious cover sheet and a fluid impervious backsheet, at least one of said fluid pervious cover sheet and said fluid impervious backsheet comprising a breathable, laminate material comprising an elastic film comprising a blend of a high performance elastomer and a low performance elastomer, said blend filled with a plurality of particles suitable for forming pores in said film upon stretching of said film, said film having been stretch-thinned, whereby a plurality of micropores are formed in said film.

57. A personal care absorbent article in accordance with Claim 56, wherein said high performance elastomer is a styrenic block copolymer.

- ✓ 58. A diaper comprising:

a fluid pervious cover sheet, a fluid impervious backsheet and an absorbent layer disposed between said fluid impervious cover sheet and said fluid impervious backsheet, at least one of said fluid pervious cover sheet, said fluid impervious backsheet, and said absorbent layer comprising an elastic film comprising a high performance elastomer and a low performance elastomer filled with a plurality of particles suitable for forming pores in said film upon stretching of said film, said film having been stretch-thinned, whereby a low performance elastomer portion of said film forms a plurality of micropores.

59. A diaper in accordance with Claim 58, wherein said high performance elastomer is a styrenic block copolymer.

✓ 60. A medical garment comprising:

a fluid pervious cover sheet and a fluid impervious backsheet, at least one of said fluid pervious cover sheet and said fluid impervious backsheet comprising a breathable, elastic film comprising a blend of a high performance elastomer and a low performance elastomer, said blend filled with a plurality of particles suitable for forming pores in said film upon stretch-thinning of said film, said film having been stretch-thinned, whereby a plurality of micropores are formed in said film.

61. A medical garment in accordance with Claim 60, wherein said high performance elastomer is a styrenic block copolymer.